

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-18 (Cancelled).

19. (Currently Amended) A method for operating a switching apparatus having multiple virtual queues and multiple switch chips, said method comprising:

- (a) receiving an incoming packet to be passed through the switching apparatus;
- (b) dividing the incoming packet into a plurality of fixed length blocks, the blocks including at least a header, a payload and a payload header, the header including control information, and the payload header including a destination identifier for the payload;
- (c) temporarily storing the blocks in the virtual queues;
- (d) determining when the payloads associated with the blocks associated with the incoming packet that are stored in the virtual queues are to be passed through the switch chips;
- (e) concurrently transferring each of the payloads and their payload headers for the blocks that are associated with the incoming packet from the virtual queues to different ones of the switch chips when said determining (d) determines that the payloads associated with the blocks are to be passed through the switch chips; and
- (f) concurrently switching the blocks associated with the incoming packet through the switch chips in accordance with the destination identifier provided within the payload header of each of the blocks,

wherein said dividing (b) operates to divide the incoming packet into blocks of multiple types, and

wherein the multiple types include at least a first type and a second type, wherein the size of the header of the blocks of the second type is smaller than the size of the header of the blocks of the first type, and wherein the amount of the data within the

blocks of the second type is greater than the amount of the data within the blocks of the first type.

20. (Currently Amended) A method as recited in claim 19, wherein said receiving (a) of the incoming packet is received at an incoming port, and wherein the destination identifier indicates a destination port.

21. (Currently Amended) A method as recited in claim 19, wherein ~~one~~ two or more of the fixed length blocks represent a cell, and ~~one~~ two or more of the cells represent the incoming packet.

22. (Original) A method as recited in claim 19, wherein the destination identifier includes a reference indicator for one of the virtual queues.

23. (Previously Presented) A method as recited in claim 19, wherein said determining (d) comprises:

(d1) requesting to transfer the blocks associated with the incoming packet; and

(d2) receiving a grant to transfer the blocks associated with the incoming packet.

24. (Original) A method as recited in claim 23, wherein the grant informs the one of the virtual queues of the blocks to be concurrently transferred during said transferring (e).

25. (Previously Presented) A method as recited in claim 19, wherein at least one of said switch chips comprises a scheduler that determines when blocks stored within the virtual queues are passed through the switch chips.

26. (Original) A method as recited in claim 25, wherein said determining (d) comprises:

(d1) sending requests to transfer blocks from one or more of the virtual queues to the scheduler, and

(d2) determining, at the scheduler, one or more of the requests to be simultaneously granted; and

(d3) informing the one or more of the virtual queues of the one or more of the requests that have been granted.

27. (Original) A method as recited in claim 26, wherein said sending (d1) sends subsequent requests to transfer blocks from one or more of the virtual queues concurrently with said transferring (e) of blocks associated with an earlier request.

28. (Original) A method as recited in claim 27, wherein the requests are provided within at least one of the blocks associated with the incoming packet.

29. (Original) A method as recited in claim 26, wherein the requests are provided within at least one of the blocks associated with the incoming packet.

30. (Cancelled).

31. (Currently Amended) A method as recited in claim ~~[[30]]~~ 19, wherein the header of each of the blocks further includes a block type so that the multiple types of blocks can be distinguished.

32. (Cancelled).

33. (Currently Amended) A method as recited in claim ~~[[32]]~~ 25, wherein the blocks of the first type are sent to the switch chip including the scheduler, and the blocks of the second type are sent to the switch chips not including a scheduler.

34. (Original) A method as recited in claim 33, wherein the blocks of the first type can include a request.

Claims 35-48 (Cancelled).

49. (Currently Amended) A method for operating a switching apparatus having multiple virtual queues and multiple switch chips, said method comprising:

- (a) receiving an incoming packet to be passed through the switching apparatus;
- (b) dividing the incoming packet into a plurality of fixed length blocks, the blocks including at least a header and a payload, the header including control information;
- (c) temporarily storing the blocks in the virtual queues;
- (d) concurrently transferring the header and the payloads for the blocks that are associated with the incoming packet from the virtual queues to different ones of the switch chips;
- (e) scheduling, independently and simultaneously at each of the switch chips, when the payloads associated with the blocks associated with the incoming packet are to be passed through the switch chips; and

(f) concurrently switching the blocks in accordance with said scheduling (e),
wherein said dividing (b) operates to divide the incoming packet into blocks of multiple types, and

wherein the multiple types include at least a first type and a second type, wherein the size of the header of the blocks of the second type is smaller than the size of the header of the blocks of the first type, and wherein the amount of the data capable of being stored within the blocks of the second type is greater than the amount of the data capable of being stored within the blocks of the first type.

Claims 50-60 (Cancelled).

61. (New) A method as recited in claim 49, wherein at least one of the switch chips comprises a scheduler that determines when blocks stored are passed through the switch chips.

62. (New) A method as recited in claim 61, wherein the blocks of the first type are sent to the switch chip including the scheduler, and the blocks of the second type are sent to the switch chips not including a scheduler.

63. (New) A method as recited in claim 62, wherein the blocks of the first type can include a request.

64. (New) A method as recited in claim 49, wherein two or more of the fixed length blocks represent a cell, and two or more of the cells represent the incoming packet.